

**ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON FISHERIES**

April 8, 2021
10:07 a.m.

MEMBERS PRESENT

Representative Geran Tarr, Chair
Representative Louise Stutes, Vice Chair
Representative Jonathan Kreiss-Tomkins
Representative Andi Story
Representative Sarah Vance
Representative Kevin McCabe

MEMBERS ABSENT

Representative Dan Ortiz

COMMITTEE CALENDAR

HOUSE CONCURRENT RESOLUTION NO. 2

Supporting the Alaska Ocean Cluster in its mission, efforts, and vision for a vibrant coastal economy in the state, its promotion of a diversified and resilient state economy that creates value from ocean resources, and its building of a statewide integrated ecosystem of innovation and entrepreneurship relating to the state's ocean economy.

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HCR 2

SHORT TITLE: SUPPORTING ALASKA OCEAN CLUSTER

SPONSOR(S): REPRESENTATIVE(S) STUTES

02/18/21	(H)	READ THE FIRST TIME - REFERRALS
02/18/21	(H)	FSH, RES
04/08/21	(H)	FSH AT 10:00 AM GRUENBERG 120

WITNESS REGISTER

SARA PERMAN, Staff
Representative Louise Stutes
Alaska State Legislature
Juneau, Alaska

POSITION STATEMENT: Presented HCR 2 on behalf of Representative Stutes, prime sponsor.

JUSTIN STERNBERG, Program Director
Alaska Ocean Cluster (AOC)
Anchorage, Alaska

POSITION STATEMENT: On behalf of the Alaska Ocean Cluster, provided invited testimony in support of HCR 2.

ACTION NARRATIVE

[10:07:43 AM](#)

CHAIR GERAN TARR called the House Special Committee on Fisheries meeting to order at 10:07 a.m. Representatives McCabe, Vance, Story, Kreiss-Tomkins, and Tarr were present at the call to order. Representative Stutes arrived as the meeting was in progress.

HCR 2-SUPPORTING ALASKA OCEAN CLUSTER

[10:08:24 AM](#)

CHAIR TARR announced that the only order of business would be HOUSE CONCURRENT RESOLUTION NO. 2, Supporting the Alaska Ocean Cluster in its mission, efforts, and vision for a vibrant coastal economy in the state, its promotion of a diversified and resilient state economy that creates value from ocean resources, and its building of a statewide integrated ecosystem of innovation and entrepreneurship relating to the state's ocean economy.

[10:08:48 AM](#)

SARA PERMAN, Staff, Representative Louise Stutes, Alaska State Legislature, presented HCR 2 on behalf of Representative Stutes, prime sponsor. She explained that the Alaska Ocean Cluster (AOC) is a cluster of innovation, a term used to describe economic hotspots where new technologies germinate at an outstanding rate and where pools of capital, expertise, and talent foster the development of new industries and new ways of doing business. She further explained that it is an area, space, or ecosystem where several groups, whether innovators, entrepreneurs, individuals, or start-up businesses get together and share access to funding, social networking, public, private, ideas, personnel, and academic and research institutions.

MS. PERMAN pointed out that the Alaska Ocean Cluster is specifically related to Alaska's blue economy, also known as blue growth initiatives. She said it is one of many worldwide clusters specifically related to oceans, with at least 50 worldwide today. Started in 2017 with a resolution from the Bering Sea Fishermen's Association (BSFA), she noted that the model for Alaska's Ocean Cluster is based off the models for Ireland, Iceland, Norway, and Canada.

MS. PERMAN stated that AOC is important because Alaska's maritime industry is huge and its growth potential is gigantic, particularly when looking at the state's decline in other revenues. She specified that Alaska is home to at least half of the nation's coastline and one-third of the nation's Exclusive Economic Zone, which is the 200 nautical mile offshore section that falls under the jurisdiction of the U.S. for maritime resources. Current industry includes offshore drilling, fisheries, shipping, and tourism, she said, and Alaska is poised to be the nation's leader in developing these industries and others such as tidal energy, utilization of fish byproduct, marine recreation, and mariculture.

MS. PERMAN related that on a global scale the blue economy is estimated to double to approximately \$3 trillion by 2030. With the Alaska Ocean Cluster and Alaska's coastlines and industries, she said Alaska is poised to be the nation's leader in maritime industries and blue growth given the right circumstances and support. The AOC leads the way in programming, advocacy, and information exchange, she said; programs offered include bootcamps for start-ups, incubation workshops for start-ups, virtual idea sharing platforms, advocacy that includes identifying current bottlenecks in regulations and regulatory pathways, leveraging networks, and developing campaigns to launch new products and companies.

MS. PERMAN noted that the Alaska Ocean Cluster relies on funding from several sources, but primarily receives large federal grants and is partially funded by the U.S. Economic Development Administration (EDA). Right now, she continued, AOC is working with Alaska's congressional delegation to increase federal appropriation opportunities. She pointed out that the legislature's role in passing HCR 2 is to send the message to Congress that the state supports what the Alaska Ocean Cluster is doing to grow this particular [economic] area.

10:15:11 AM

REPRESENTATIVE KREISS-TOMKINS inquired as to why HCR 2 is a concurrent resolution rather than a joint resolution.

MS. PERMAN offered her understanding that a concurrent resolution does not have to have the signature of the governor.

[10:15:41 AM](#)

REPRESENTATIVE VANCE related that she has searched online to see what AOC is about and has done over the past few years. She said she came across an article in "National Fisherman" magazine about Seward being the first Alaska community to work with the Alaska Ocean Cluster. She stated she was impressed that one business filed a provisional patent on a new technology that won an invention of the year award at the University of Alaska Fairbanks (UAF). The invention, she continued, pulls hydrogen out of the ocean water that can be stored for battery use and deacidifies the water, a remarkable potential technology that could help reduce acidification. She requested examples of other innovations that have come out of this think tank.

MS. PERMAN replied that a small example is salmon fertilizer, a byproduct of waste. Prior to formation of the AOC, she added, Yummy Chummies came out. She said four start-ups are actively working with the Alaska Ocean Cluster currently. She deferred to Justin Sternberg of AOC to answer further.

[10:17:54 AM](#)

REPRESENTATIVE MCCABE asked whether the Alaska Ocean Cluster is a part of the Bering Sea Fishermen's Association given the person running AOC is an employee of BSFA. He said he looked at the BSFA website and found that it specifically excludes Southcentral from BSFA's purview. He asked what the benefit of this is for the entire state of. He noted that the BSFA board includes some folks from Juneau and Kodiak. He further asked whether there are plans to expand and to take in all of Alaska or whether it is specific to the Bering Sea and Juneau.

MS. PERMAN answered that AOC was created by a BSFA resolution and falls under that umbrella, but her understanding is that it is statewide. She said there is talk about having a physical hub located in Seward for some of these programs and at one point grant funding was being sought to do this. She pointed out that the quote from BSFA used in HCR 2 is to promote and enhance maritime industry, growth, and prosperity in Alaska, so

she is optimistic that that is statewide. She deferred to Mr. Sternberg to answer further.

10:19:54 AM

REPRESENTATIVE MCCABE commented that it is a great program but if the state legislature is supporting one program in only one area of the state, then maybe the legislature needs to support something that is going to be more all-inclusive. He related that the BSFA website includes a map that excludes Southcentral and most of the south side of the Aleutians. He observed that one of the board members is on the Alaska Railroad Corporation and asked why that is. He further observed that another board member is with PKS Consulting and asked what that is.

REPRESENTATIVE KREISS-TOMKINS offered his understanding that BSFA is the fiscal sponsor for AOC and that AOC is totally and entirely a statewide endeavor. He said he has interacted with the AOC staff for several years and there is no question that AOC encompasses the entire state and the BSFA connection is not material as far as how AOC is conducting itself.

REPRESENTATIVE MCCABE stated that those were his thoughts as well until he looked at the BSFA website and saw that "pretty much the entire AOC board works for them, or the staff works for BSFA." He said he is looking for information because he really does want to support this.

10:21:46 AM

CHAIR TARR opened invited testimony on HCR 2. She requested that Mr. Sternberg first provide his invited testimony and then answer Representative McCabe's questions.

10:22:08 AM

JUSTIN STERNBERG, Program Director, Alaska Ocean Cluster (AOC), on behalf of the AOC, provided invited testimony in support of HCR 2. He confirmed that AOC is a program of the Bering Sea Fishermen's Association, which launched the AOC in 2017 to promote and enhance maritime industry growth and prosperity in Alaska. He further confirmed that BSFA works in Western Alaska, but the AOC was founded to address Alaska as a statewide initiative and AOC has operated that way since it began. He noted that the AOC is BSFA's first program with a statewide focus. In the past, he continued, BSFA has launched other organizations and incubated them through their development until

they spun out as entities, which includes the community development quota (CDQ) groups and various nonprofit and for-profit entities that were started under the 501(c)(3) umbrella of BSFA.

MR. STERNBERG said AOC is in its third year, its mission is to grow Alaska's sustainable ocean economy, and is funded through a mix of grants and support from its parent organization. In addition, he continued, AOC is developing a membership model to engage ocean-based industry partners. He related that in 2020 AOC was awarded an EDA grant of \$2 million to build on AOC's work with ocean-based entrepreneurs; the grant funded the creation of Blue Pipeline Ventures. As part of that program, he specified, AOC hired two promising young Alaskans: Taylor Holshouser, a fellow with the [Wilson Center's] Polar Institute and AOC's director of business development, and Garrett Evridge, formerly the chief fisheries economist at McKinley Research, and the leader of AOC's [strategy, research, and administration].

MR. STERNBERG specified that AOC is focused on the opportunities in seafood processing for full utilization, as well as mariculture, particularly seaweed mariculture in which Alaska has a good shot at becoming a world leader. He said AOC is also looking at ocean energy as well as technology and innovation that has the promise to solve some of the [fishing] industry's challenges, for example bycatch. He added that two other areas of programmatic focus for AOC are fund development, and policy and legislation, a program led by Ephraim Froehlich. He said AOC is seeing a significant amount of funding coming into either ocean clusters or ocean-based development and AOC is looking for opportunities to bring those funding streams to Alaska.

MR. STERNBERG stated that AOC is presently working with four companies in early-stage endeavors, one of which has a focus on using artificial intelligence (AI) and data to map sea ice as well as fisheries locations that could be applied to more fishing operations and better navigation. He said another company AOC is working with has smart technology that can identify where buoys are left so it is easier for fishermen to recapture them, especially if they get lost. Another company, he continued, is looking at ways to streamline the processing on board vessels to reduce the time and cost involved through using machine learning and computer vision to improve the processing of whitefish. He added that other examples of companies that AOC has worked with include a coastal tourism company, the company that filed a provisional patent, a mariculture company, and a small seafood processor.

10:27:30 AM

CHAIR TARR requested Mr. Sternberg to elaborate on AOC's relationship with BSFA.

MR. STERNBERG replied that the Alaska Ocean Cluster was launched by the Bering Sea Fishermen's Association and is BSFA's first statewide initiative. He said BSFA has a history of launching and cultivating early-stage businesses under its wing until the businesses are ready to become independent. He added that AOC remains under the 501(c)(3) of BSFA and receives some of its funding from this parent organization as well as benefitting from BSFA's many decades of successful grant writing and experience working in Alaska.

10:28:23 AM

REPRESENTATIVE MCCABE asked whether AOC has solutions regarding bycatch. He predicted bycatch will be a forthcoming issue before the committee because it is so huge, and a solution is needed instead of dumping dead fish back into the ocean. He further asked when AOC would be spun off on its own from BSFA.

MR. STERNBERG agreed the issue of bycatch is significant and a big industry issue. He said AOC doesn't yet have a solution but believes it could exist through some of the technologies that are being developed, such as fish exclusion nets and artificial intelligence technologies that can help identify where to be fishing and to predict where fish are moving. Regarding when AOC will be independent, he said he doesn't have an exact date, perhaps a year or so, but that AOC is currently in the process of looking at what that entails and fiscal sponsorship under BSFA would probably continue.

10:30:47 AM

REPRESENTATIVE STORY requested Mr. Sternberg to elaborate on how it comes about that the Alaska Ocean Cluster, through the Arctic Economic Council and the pan-Arctic community, helps provide world-class representation of Alaska to other organizations.

MR. STERNBERG replied that often it involves just an invitation from an organization. He said there is quite a bit of interest in what is happening in Alaska from other Arctic nations. The original inspiration for AOC, he stated, came out of Iceland through that country's ocean cluster, where a goal has been set

of 100 percent fish utilization in their seafood processing. Iceland, he related, has turned what was waste products into value-added products, many of which have more value than the protein from the fish. He said there are great opportunities for connecting with the international community and looking at best practices that have already been developed in other locations and then bringing them to Alaska and modifying them to fit the conditions here. He noted that through Mr. Holshouser and the [Wilson Center's] Polar Institute, AOC has been engaging internationally for three years. He further related that he himself sits on the Blue Economy Working Group for one of those institutions and is looking at how the successes of Alaska's neighbors can be replicated, as well as sharing Alaska's areas of expertise.

10:33:15 AM

REPRESENTATIVE KREISS-TOMKINS observed that the PolArctic LLC letter of support expounds on the portfolio of enterprises that are doing innovation in the maritime sector, especially for out of state entities and what the ultimate linkage is to Alaska. He noted that "Launch Alaska" is an accelerator that has a national portfolio and asked what AOC's strategy is.

MR. STERNBERG responded that AOC has a three-prong strategy there that is sort of based on the experiences of Launch Alaska. At the start, he explained, they were very focused on Alaska based businesses, but to maintain the throughput of deal flow that is required to operate an accelerator there needs to be enough businesses coming through, so there was expansion to a national approach. First and foremost, he said, AOC is looking at supporting Alaska based businesses, but there are some challenges in remote coastal Alaska where it is difficult to find the human capital to build a well-rounded team that has all the areas of expertise necessary. So, he continued, the Blue Pipeline Venture Studio that AOC launched in October addresses that human capital restraint by working closely with the companies and providing some of the services they need to grow their company to a point where they can receive funding and then launch it. He further explained that AOC also looks at companies which are not based in Alaska but have an addressable market here, technologies that would be useful here, and PolArctic, based in Virginia, is one of those. He said PolArctic's founders are two Alaska Native women who now live in the Washington DC area, and they have some technology that would be useful in the areas of identifying sea ice flows and potential fisheries, fish movement and locations. He stated

that AOC is also interested in looking at gaps in the market for opportunities to start a company that AOC might be interested in launching itself, then finding an entrepreneur who could then take that company and run with it, particularly if it helps provide the value chain that would be necessary to grow and emerging industries such as mariculture.

MR. STERNBERG closed his testimony by noting that AOC is excited to be engaging with the legislature and looks forward to working with the state. He said the support AOC has received from the federal delegation has been fantastic.

10:37:01 AM

CHAIR TARR addressed the difference between concurrent and joint resolutions. She explained that a concurrent resolution is used for internal business of the legislature, such as suspending and amending the uniform rules, requesting action of executive agencies, interim committees, fixing the time and place for joint committees, and establishing joint committees, whereas joint resolutions are used to communicate to Alaska's federal delegation. She said HCR 2 is a concurrent resolution because it is internal business.

REPRESENTATIVE KREISS-TOMKINS stated that it seems like this should be a joint resolution because it is for external audiences rather than the internal business of the legislature.

CHAIR TARR pointed out that the resolves in the resolution do not include communicating to the federal delegation and that is why she thinks it ended up being a concurrent resolution. Typically, she continued, a joint resolution would include a further resolve that says copies will go to all the federal people, but for this resolution it is the legislature welcoming opportunities to collaborate with the Alaska Ocean Cluster.

REPRESENTATIVE KREISS-TOMKINS stated he thinks joint resolutions are not just exclusively for the congressional delegation but for any external audience that the legislature is expressing its position on. He allowed that the legislature's support will be clear in either instance.

10:39:07 AM

CHAIR TARR opened public testimony on HCR 2. She closed public testimony after ascertaining that no one wished to testify.

[10:39:23 AM](#)

The committee took an at-ease from 10:39 a.m. to 10:42 a.m.

[10:42:06 AM](#)

CHAIR TARR announced that HCR 2 would be held over so the resolution's format, not the resolution's content, could be looked at further.

[10:42:43 AM](#)

REPRESENTATIVE KREISS-TOMKINS offered his support for HCR 2 and extended compliments to the talented team at AOC.

[10:44:05 AM](#)

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Fisheries meeting was adjourned at 10:44 a.m.